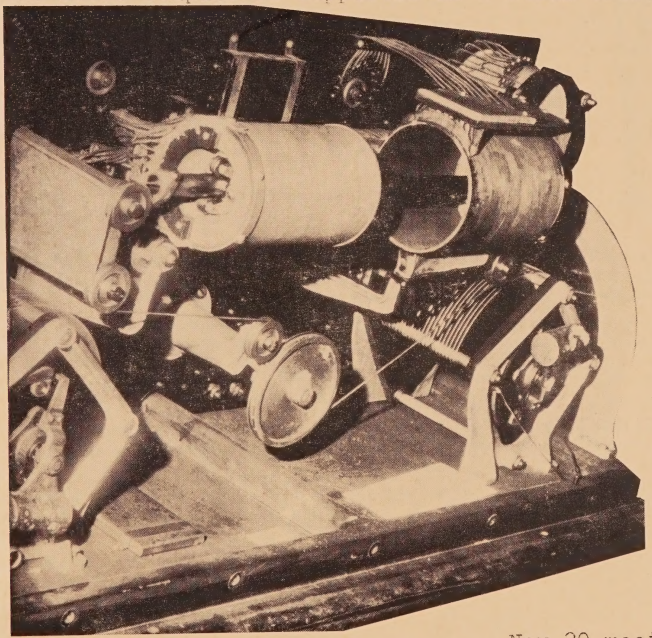
California Antique Radio Gazette

Official Journal, Southern California Antique Radio Society.

VOLUME 8 AUGUST 1983 NUMBER 3

AMERICAN MARCONI TYPE IOI TUNER
Interior View
200 to 7500 Meter tuning range.
The loose coupler is supported on a steel tube.



(Continued on back cover.)

Nov.20 meet at Burbank

SOUTHERN CALIFORNIA ANTIQUE RADIO SOCIETY

SCARS

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Address official correspondence to Charles Farnsworth. Send requests for application to join the club to Edward Sheldon. Send dues to Walter Curry. Send information and articles for the publications to either co-editor, David Stout or Floyd A. Paul.

The *Gazette* is the official Journal of the Southern California Antique Radio Society (SCARS) and has a planned publication of four times a year, and is furnished free to to all members. Neither this publication nor the society are responsible for swap and trade ads.

SCARS is a non-profit organization. Its purpose is to preserve the history of wireless communication by encouraging the acquisition, preservation and exhibition of antique wireless and radio apparatus and publications pertaining to its history and development.

SCARS promotes social contacts through meetings held four times a year in various locations in Southern California. Featured at these meetings are contests, swap sessions and talks by members and guests on subjects of interest to collectors.

The club publishes quarterly the *California Antique Radio Gazette* or Newsletter which feature articles of historical interest, news of club activities, hints on restoration and advertisement of radio related items available for sale or swap. These ads are printed free for members.

Membership is open to anyone having a genuine interest in preserving the equipment and history of early wireless and radio equipment. Dues are $10.00 per year.

ANNOUNCEMENT

Club Decal and Logo

The club now has a supply of decals available for 50¢ each. They are 1¼" diameter. The background is gold and the print is in black. They have a self-stick adhesive on the back. Contact any club officer for copies.

AUGUST 20 MEET

LOCKHEED EMPLOYEE RECREATION CLUB
2814 Empire Avenue
Burbank, California

8 to 11 A.M. Swap Meet
11:30 A.M. Business Meeting
CONTEST JUDGING
10:30 to 11:00

Categories for the August meet will be the following:

(1) Tubes prior to 1927.
(2) AC sets prior to 1930.
(3) TRF sets.
(4) Open.

TREASURER'S MESSAGE

To SCARS Members:

Our program of expanding club membership in 1983 has resulted in an increase in paid membership from 185 in 1982 to 269 so far this year. Our strengthened treasury now allows us to incorporate, and assures four *Gazettes* will be published this year.

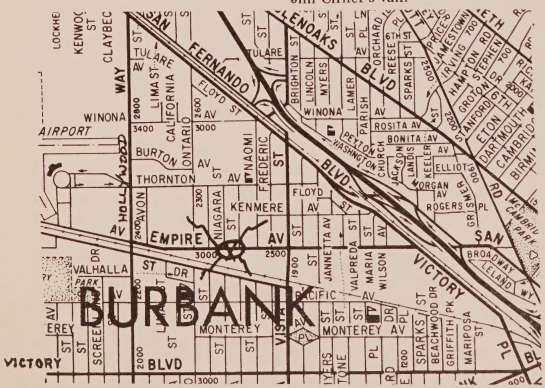
The groundwork has been laid. However, strong and sustained club activity requires an active membership, willing to volunteer their services. Articles for the *Gazette* are always needed and should be sent to the editor. The club needs a volunteer to organize programs. We need volunteers to give short talks and demonstrations.

For bigger swap meets we need to establish a new meeting place south of Burbank and west of Redlands. Los Angeles members should work on this and are urged to contact any club officer about a suitable site.

See you in Burbank in August.

Walter Curry
Treasurer, SCARS

The club officers want to thank Ben Romano for hosting the May 14 meet in Redlands. Purchasing the donuts, providing a meeting room for the business meeting, and for getting the use of the Mission School for the swap meet itself. For those who don't know Ben, see the Redlands Meet pictures. Ben is by Jim Cirner's van.



THE DICTOGRAPH PORTABLE HORN SPEAKER

By FLOYD A. PAUL

GENERAL:

The Dictograph Products Corp. made several earphone and horn speaker products. The most popular was the "Portable" model horn speaker. Ads in *Radio News* and *Popular Radio* of October 1922 announced, "Now Ready, The Dictograph Radio Loud Speaker — for the home." Until December 1924 when the last styling was advertised there had been five different styles. These styles might best be grouped and identified as follows: See Table 1

GENERIC DESCRIPTION:

A description of the portable loud speaker design is (1) a base wood cabinet 6" by 5" by 4" high, with rubber knobs for feet. (2) a cast aluminum "C" shaped neck attached to the back side of the cabinet, (3) a name plate on the front of the cabinet and (4) a bell, attached to the neck, which protrudes over and visibly obscures an upper portion of the base cabinet, when viewed from the front. A picture shows the five styles.

MODEL DESCRIPTIONS:

The first advertised style was visually striking, with its French lacquered copper spun bell. Nickel trimmings accentuated the finished product. The logo name plate on the front had "Dictograph" on it. The second style, not advertised but believed to have been made in early 1923, used a brass bell, painted black. The same "Dictograph" logo plate was used. The third style, which was advertised, had a shaft protruding through a hole in the front logo name plate with a name change to introduce the model name, "Dictogrand." The knob on the shaft rotated an internal gear train to vary an adjustable air gap which provided volume control and sensitivity variation. The whole horn speaker was painted black, with orange/reddish paint flicked on it as an overlay. This effect gave the horn a more colorful appearance and was advertised as a mahogany finish. The fourth style was a color variation of the third style, and was introduced about mid-1923. This model was by far the most common of all the styles. It was totally black. (Some collectors have these horns with bright bells. The bells have been stripped of black paint and the bright brass bell resembles the first generation style of a brightly polished copper.)

The fifth, and last style, was first advertised in December 1924. No ads were to be found in 1925 magazines. This style, which appears to have been geared toward simplified production and reduced costs, had the following differences from the other horns: (1) a 10½" diameter spun metal bell became a 12" diameter hard-molded rubber bell. (2) the machined adjustment knob and shaft protruding through the cabinet base were replaced with a simple stamped sheet metal thumb wheel with serrations, protruding through the top of the wood box base, and this wheel adjusted the air gap in the driver unit.

NAME PLATE SCENARIO:

The author has written or visited a dozen collectors who have Dictograph/Dictogrand portable horn speakers in their collections. By obtaining serial numbers, and visually noting variations of over 25 horn speakers, the following scenario was put together.

(1) The First Dictograph nameplates were silver colored lettering over a black background. The mahogany painted horns used the same coloring on Dictogrand nameplates

(2) The first black-bell painted Dictogrands changed to a black lettering over a gold background.

(3) Starting around S/N 20,000 the label was changed back to silver over a black background.

(4) The hard rubber bell series used a different logo plate altogether. It used a single word "Dictogrand" on a slender curved nameplate attached to the base plate of the box.

The picture shows the three types of nameplates and their location on the base box.

Some variations noted from collectors are: One horn of the black-bell Dictogrand series was found to have an aluminum bell under the black paint. Some bell diameters varied plus or minus a half-inch. One Dictograph horn bell (probably brass) was painted gold. Early Dictogrand mahogany styles had copper bells. The Dictogrand black bell (most common) horn was labeled 'R3' for the first production units, and 'R4' during the later production run. It is estimated the R3 designation started about August 1923 and went to March 1924, when the R4 designation appeared. It is not known just how the R4 differed from the R3.

TOTAL HORNS:

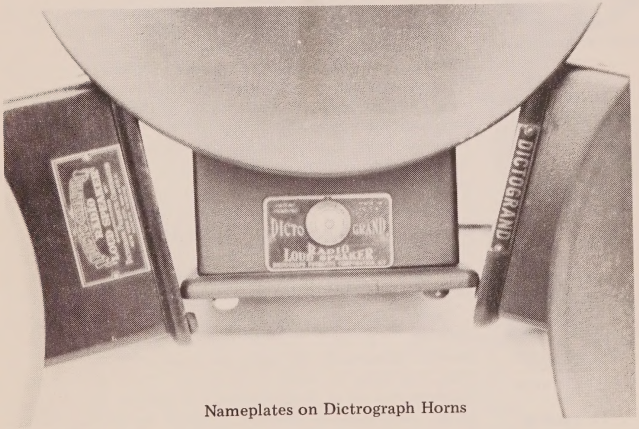
The author estimates the production quantities of Dictograph portables was upwards of 60,000 units. The production quantity estimates for the five styles shown in the table, starting with the Dictograph copper bell, is as follows: (1) 10,000; (2) 4,000; (3) 4,000; (4) 35,000 and (5) 4,000. A survey of 32 collectors across the country, reporting 49 portables, shows a ratio of approximately 72% Black Dictogrands, 12% Dictographs, 10% mahogany Dictogrands and 6% rubber Dictogrands.

Continued on P. 3

Five Types of Dictograph Portable Horns

Style/Name	1st Adv.	Bell Mat'l	Bell Dia.	Coil Res.	Bell Finish	Vol. Cont. Location
Dictograph	Oct. 22	Copper	10½	1.4K	Polished	-----
Dictograph	-----	Brass	10½	1.4K	Black	-----
Dictogrand	May 23	Copper	10½	4K	Mahogany	Front
Dictogrand	-----	Brass	10½	4K	Black	Front
Dictogrand	Dec. 24	Hard Rubber	12	4K	Black	Top

Table 1



Nameplates on Dictograph Horns

Dictogrand

Two Models: UPRIGHT AND PORTABLE

DICTOGRAPH PRODUCTS CORP.

NEW YORK, N. Y.

Pacific Coast Agent: Leroy C. Bishop

1241 Pacific Mutual Bldg., Los Angeles, Calif.

EARLY YEARS

The Gilfillan Story

The history of Gilfillan is a long and fascinating story. It is a history alive with human interest; a story epitomizing the American system. Many of the principles and sound business practices observed in our day to day operations can be traced back to the founding years, and, more important, to the men of vision and strength who were responsible for the growth of Gilfillan.

Such men were the Gilfillan brothers. During the summer of 1912, S. W. Gilfillan and his brother Jay devised a means of extracting precious metals from the dark soil of Oregon. These metals, platinum and iridium, were sold to dentists and jewelers for use in dental work and in the mounting of precious stones.

1912—1922

ELECTRICAL RESEARCH

The small shop engaged in these extracting processes was located on Santee Street in downtown Los Angeles. The high quality of the Gilfillan-processed ore became widely known, and the business prospered.

1922—1937

AIRCRAFT EQUIPMENT–RADIO

This, however, was before the days of anti-trust laws, and a company in the East which had a monopoly on the processing and distribution of these metals coerced its customers into dropping Gilfillan Brothers as a supplier. The young company soon found itself with a rapidly shrinking market.

1937—1942

TELEVISION–RADIO

In experimenting to discover other uses for the product, the company worked with the use of iridium contacts in the magnetos used in automobiles at that time. They discovered that iridium contacts lasted up to five times as long as those previously used, and began production and distribution of these. The new Gilfillan magnetos became so popular that the market soon expanded not only throughout the United States, but the world as well. In such far countries as Australia, Africa, China and Canada, Gilfillan came to stand for the best in automotive magnetos.

1942—1952

GILFILLAN GCA RADAR

From this start Gilfillan Brothers branched into the production of ignition parts for automobiles. There was at that time an acute need for an ignition system cover which had a high electrical resistance and high impact strength, and which could be manufactured with speed, efficiency and low cost.

After rejecting several mixtures which did not meet these exacting standards, the two brothers heard of a new plastic powder compound that was the work of a German scientist who had recently come to America. Tests proved that the material had all of the properties required for the ideal ignition cover, and Gilfillan Brothers ordered the plastic powder in large quantities, set up presses, and were in business as the first plastics manufacturer on the West Coast.

1952—PRESENT

RADAR DEVELOPMENTS

The German scientist was Dr. Bakeland, and the material became known as Bakelite.

Further chapters of the Gilfillan story will be featured in future issues of *The Scanner*.

Reprinted from the Dec. 1964 *The Scanner*, published by ITT Gilfillan, Inc.

THE AMRAD REFLEX

By Alan Douglas

Subscribers to *Radio Age* will note that I already described the Amrad 3366 in part 6 of a series on that company (Dec. 1981). However, the photo I used was of a set in the wrong cabinet and with one wrong dial, and I showed no interior views (I also made an error in tracing the wiring diagram). And many present readers will not have seen the series anyway.

For reasons unknown, Amrad tried in 1921 to buck the Armstrong patent head-on, by openly marketing a regenerative receiver without possessing a license. This did not sit too well with Westinghouse, the patent owner, and Amrad got stung pretty badly, to the tune of a stockroom full of unsalable regenerative receivers, the well-known "double-deckers." Most of them were later modified slightly, and sold as non-regenerative sets; the dealer took each customer into the back room and showed him how easy it was to re-connect the regeneration by clipping two wires and moving two jumpers.

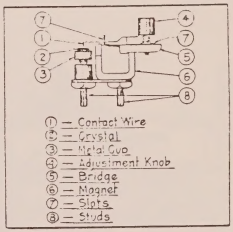
But this was hardly the way for a prestigious manufacturer to build his reputation! Amrad had to have some "legal" receivers to sell, that performed as well as the forbidden regenerative models. There were two ways to go about it: RF amplification, and reflexing, and Amrad did both. Their RF sets, which I covered fairly thoroughly in *Radio Age* were made up of old double-deckers, modified as little as possible, and therefore not especially efficient. They were probably intended to use up stock on hand, since Amrad was definitely feeling the money pinch. Probably few were made, and fewer yet have survived today. In 1923 these RF-amplifier models evolved into the Inductrole, a far better mechanical design.

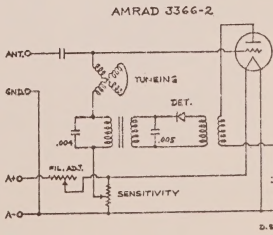
Meanwhile, Amrad needed a low-priced, simple receiver they could sell in large numbers. In June 1922 Howard Tyzzer, their ace designer, began working on such a set, and by the end of August his one-tube reflexed model was ready for production (this was a new speed record for Amrad, by the way; a year was more typical of their design and setup times in earlier days). In mid-October the model 3366 was introduced at $40. It remained in their line for about a year, and went through two model changes (the one pictured here being a 3366-2). I have seen four of them, so far, in collections today, more than any other single Amrad model except the double-decker, so apparently quite a few were made.

The 3366 pictured here was in remarkably good condition when I got it, aside from having lost its original crystal detector (believe it or not, Ripley, it had a red plastic Philmore plugged in). Transformers and paper condensers (marked the same but measuring variously .003 to .005 mfd) were all good, leaving me no choice but to plug in a UV200 and fire it up. It worked! Not as well as an Aeriola Sr., say, but better than a non-regenerative de Forest Radiohome. I would guess I could separate about two dozen stations, if I had sat there long enough, though I spent most of my listening time following a basketball game in progress.

The 3366 shows typical Amrad construction: ingenious, and well-built, not up to the standards of Grebe or Kennedy, perhaps, but making Amrads highly-desirable collectors items. However, workmanship did not sell radios to the general public. Advertising and sales techniques did that, and the "most deserving" (from a collector's warped viewpoint) often got steamrollered by the Crosleys who could sell radios better than they could build them. And it was Crosley who bought the remnants of Amrad in 1925.

Detail of Magnetic Crystal Detector





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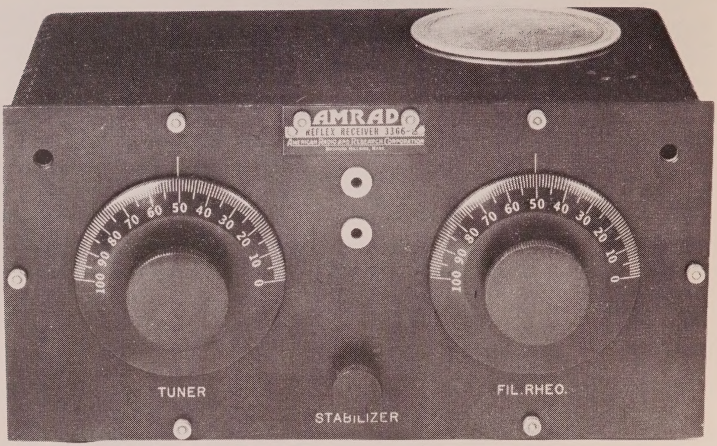
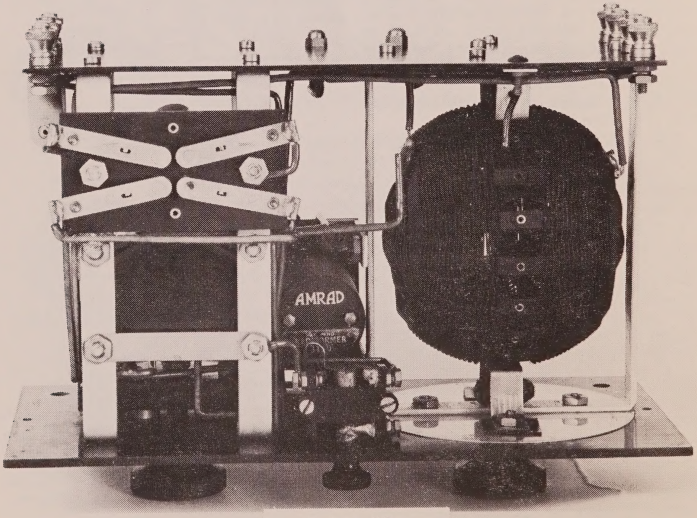
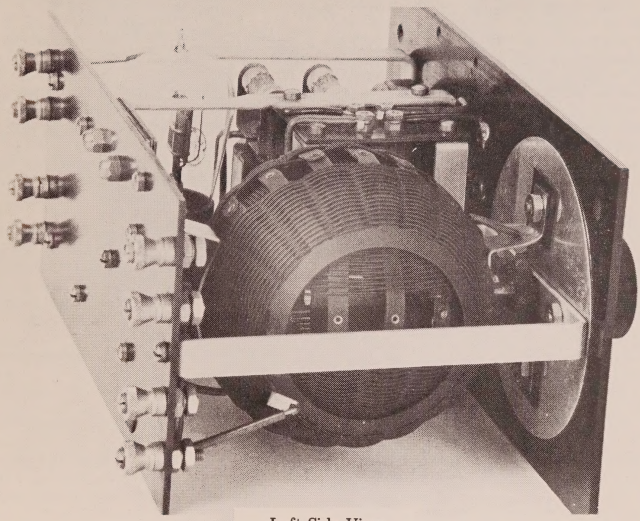
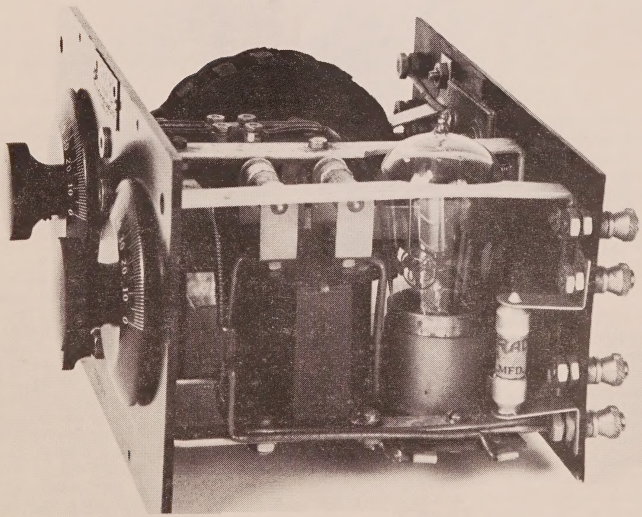

AMRAD
REFLEX RECEIVER 3346-C
TUNER
STABILIZER
FIL. RHEO.


AMRAD

Bottom View



Left Side View



Right Side View

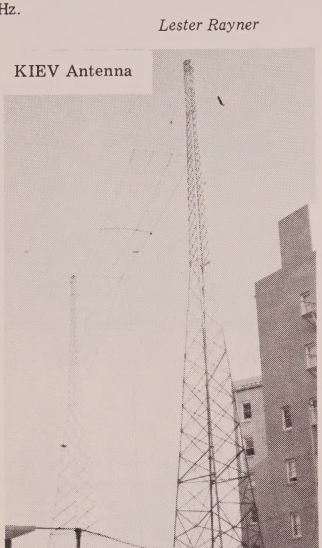
BELIEVE IT OR NOT

Today no one pays much attention when we pass the lonely single transmitting tower out in the countryside, but believe it or not, there still remains an old four wire transmitting antenna which makes you sit up and take note, in Glendale, California.

A station with the call letter KIEV, 5000 watts, uses the good old style antenna as shown in this photo. The station transmits on 870 kHz.

Lester Rayner

KIEV Antenna



RECENT PUBLICATIONS

Review by Floyd Paul

70 Years of Radio Tubes and Valves by John Stokes, from the Vestal Press, Vestal, New York 13850. $21.95. A 247 page book on U.S. and foreign tube history. A well written and easily read, and very well illustrated book. The author does an excellent job of covering early tube development, World War I, various manufacturers, miniatures, octals and more. The pictures do much to enhance exactness and give visual interest. The book is an excellent supplement to Tyne's book of tubes. If one orders three or more books, a 40% discount is offered.

SHORT WAVE LEAGUE

Do You Remember When?

By Lester Rayner

I guess I had my Pilot Super Wasp about a year and a half when I became a member. In fact, the club had just started.

The old Super Wasp was of the D.C. vintage and being a big spender, right off I went to Allied Radio and squandered my money on an A-B-C battery eliminator.

I don't know if anyone can describe the thrill of tuning in the world on short wave back in the Thirties. You had to be there to really know what it meant.

Getting back to "Do You Remember When" of the Short Wave League when it started with its announcement in the May 1932 issue of *Short Wave Craft* magazine. The executive secretary was our good friend, Hugo Gernsback.

Just for the fun of it, here is the "Short Wave League Platform":

1. To help popularize short waves among the public.
2. To assist authorities in the apprehension of criminals and in general crime prevention through the instrumentality of short waves.
3. To demand enactment of new regulations enabling operators of phone transmitters to be licensed without code requirements, below 6 meters.
4. To bring together short wave enthusiasts by promoting comradeship among them.
5. To eliminate man-made static, the greatest enemy of short waves.

I still have my Short Wave League button. I wonder if my membership is still in good standing?

RADIO SHOP

Stew Oliver and Floyd Paul are seeking information on *Radio Shop*; its history, its products, and how the Sunnyvale plant was tied into Long Beach and Chicago. Any information will be appreciated.

Antique Radios — Restoration and Price Guide, by David and Betty Johnson, from Lamplighter Books, Leon, Iowa 50144. $10.95. A 99 page book on restoration. It is a book for beginners and newcomers, not particularly useful to the experienced radio technician. However, its many pictures of AC sets makes this soft-bound book a valuable addition for reference. One of our new members, Mr. Glen Hadsell, Omaha, Nebraska, once owned many of the sets pictured in this book. The book's appendix contains many references for sources of parts, schematics and magazines. It also contains a price guide to over 500 sets, which the editor found obsolete, as any *one time published price guide* would be.

HIGHLIGHTS of the May 14, 1983 SCARS MEETING at Redlands, California

By Ed Sheldon

The meeting was called to order at 11:15 by SCARS president Charles Farnsworth. There were about forty members present. The minutes of the previous meeting, held on February 19, were read and approved with no correction.

Treasurer Walt Curry reported a balance of $2500 in the treasury and 250 paid up members.

Roy Tucker gave a progress report on the club logo and badge. Four designs (configurations) were submitted to the members for a vote. A design was chosen by vote. The members then voted to sell the club logos at 75¢ rather than 50¢ to provide funds to amortize the costs of the die.

Bill Alvarez announced the winners of the May contest. The results are published elsewhere in this issue.

Floyd Paul announced that the book *Antique Radio* by Dave and Betty Johnson will be available at $7.00 plus a shipping charge. Contact Floyd if you are interested.

Ben Romano was thanked for his role in making the Redlands Mission School available for this meet.

The business meeting was then adjourned. In the Show and Tell that followed, Roy and Kathryn Tucker gave a presentation on the "First Years of Wireless in War," which we learned was during the Boer War, 1899—1902.

ANNOUNCEMENT

The annual club meeting will be on November 19th at the Velvet Turtle, 3210 W. Sepulveda Blvd., in Torrance. Election of officers, a sit down luncheon and minimal business will be conducted. A short program is planned. See details in the October *Gazette*. Ralph Clark is organizing the meeting site.

ANNOUNCEMENT

TRW HAM SWAP MEET

The usual last Saturday of the month meet was cancelled for June only. The weekend of June 25-26 was committed to a field-day exercise which the TRW Ham Club didn't want to distract.

The TRW Swap Meet will be back at its usual time and place for July and the coming months.

ANNOUNCEMENT

TIME MACHINE

By Don Schubert

Fibber McGee, in one old radio episode, was rewiring his radio to receive old radio programs which he insisted were "out there" somewhere.

Well, we all know that no amount of rewiring will bring back the past, but there is another way. It can and is being done right now by *SPERDVAC*. Let me explain.

About the time SCARS was being formed, another dedicated group was busy forming a similar organization. They collect and preserve the spoken words, music and memorable moments that issued from those old radios which we collect in SCARS. The name of the group is the *Society to Preserve and Encourage Radio Drama, Variety and Comedy* or simply *SPERDVAC*. They were formed, and are very active, right here in Southern California, just as SCARS is. They have over 800 members and hold monthly meetings, usually with an old time radio personality as guest speaker. They have a 5000 hour tape and cassette library which members may borrow for listening and recording. They publish a radio log of all the old and new programs being aired locally on AM and FM. In the monthly newsletter, members may place free classified ads.

Sound interesting? Send a business size SASE to SPERDVAC. P.O. Box 1587, Hollywood, CA 90028. In no time at all you can be back in the Golden Age of Radio hearing the sounds that came from those great old radios in your collection.

ANNOUNCEMENT

The ARIZONA ANTIQUE RADIO CLUB is now accepting applications for membership. As a sister club to SCARS, serving the state of Arizona, we invite our California and other neighbors to join us for swaps, journal mailings and shared interest and knowledge. Write to: Treasurer, Lee Sharpe. 2224 W. Desert Cove. No. 205. Phoenix, AZ 85029. (602) 861-1388.

THE HORN SPEAKER

The Horn Speaker is a tabloid newspaper published ten times a year and has been published for over ten years, to help radio collectors add to their collections and to understand the era in which the vintage sets were made. $8.50 yearly. Box 53012. Dallas, TX 75253.

Nov. Gazette material deadline is Sept 15.

OLDE CONTEST CORNER

Dear fellow club members:

I apologize for the *apparent* inconsistencies in the judging and categories which were utilized at the May meet. However, it became quite apparent that ten categories were just too many, as it would have meant that all the entrants would have either won first or second place! Only fifteen sets were entered.

For this reason, three categories and one open class were used. Obviously, this did not satisfy me, nor those who *lost*. I apologize.

The following were the winners at Redlands:

(1) HORN SPEAKERS
1st — Bristol Co., by Forrest Pearce.
2nd — Timbreton, by Floyd Paul

(2) BATTERY SETS
1st — Radiola, by Ed Sage
2nd — Michigan, by Forrest Pearce

(3) AC SETS
1st — GEC, by Suarez
2nd — Guild, by Bill Robins

(4) OPEN
1st — Weston Tube Tester, by Mike Vaziri
2nd — KLG, by Brad Ormsby.

Categories for the August meet will be the following:

(1) Tubes prior to 1927.
(2) AC sets prior to 1930.
(3) TRF sets.
(4) Open.

Please review at your leisure the categories and values of the attached grading sheet. If you have any suggestions and/or corrections, do not hesitate to let me know of your displeasure. A few plaudits, if warranted, would not be ignored either.

Bill Alvarez
WB6EYL

CLASS_____ REGISTRATION #_____

SET NAME_____ MODEL_____

EXHIBITOR_____

APPEARANCE OF SET:

Original Finish-cleaned up well.....(15)___
or Good Restoration.....(15)___
Overall Condition.....(15)___ ____

DISPLAY:

Set open for inspection.....(10)___
Supportive Materials:
Advertisements.....(5)___
Catalogs.....(5)___
Original Packing Crate.....(5)___
Original Operating Instructions.....(5)___
Reproduction Operating Instructions.....(3)___
Original Warantees.....(5)___
Reproduction Warantees.....(3)___
Original Tags & Decals on Chasis.....(5)___
Original Tags & Decals on Case.....(5)___
Other (specify).....(5)___ ____

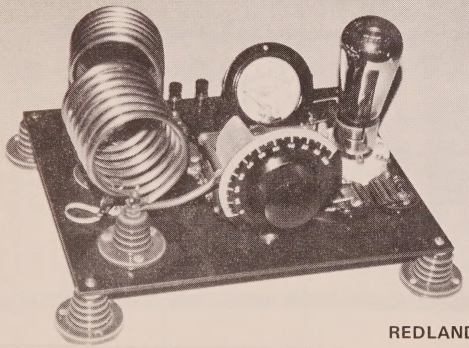
RARITY AND HISTORICAL SIGNIFICANCE

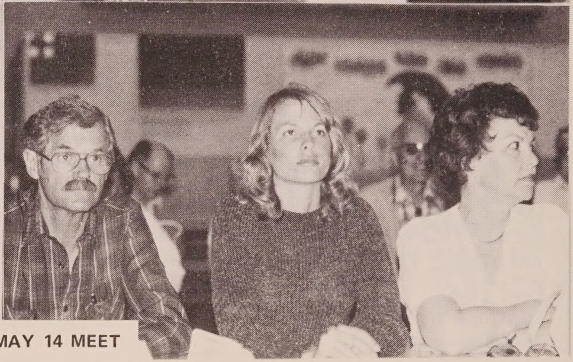
.....(15)___ ____

JUDGES PERSONAL OPINION

.....(10)___ ____

CF 8-80 TOTAL..... ____





REDLANDS MAY 14 MEET

ANTENNA CLEANER

Operates by wind.
Travels from end to end in rotary motion.
Mfd. and sold by inventor.
Price $1.00 Post Paid
G. P. McINTIRE, 17 N. Crawford Ave., Chicago

SOLDERALL

COMPLETE METAL SOLDER IN PASTE FORM
EQUAL TO WIRE OR BAR SOLDER
SOLDERALL
Every Electrical Connection needs Solderall for perfect reception
25¢

L. S. BRACH MFG. CO. NEWARK, N.J.

Crystodyne Detector. For All New Oscillating Crystal Circuits

(PATENTS PENDING)

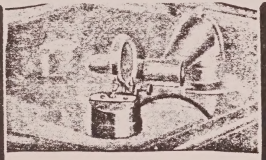
$1.75

6900

Here is a detector which has been especially developed by us for the new **Crystodyne** circuits. This detector while using the natural mineral zincite can be used with any other crystal as well. Several unique features are embodied in this detector. To begin with it is the only detector that has a **sliding crystal cup** with perfect contact arrangement and which cup not only slides but rotates with an eccentric motion. (Note slot A.) By means of the small knob the cup slides easily so that any point of the crystal can be brought into contact. A new crystal can be located immediately by unscrewing the small knob. The contact plate which at the same time forms the catwhisker is made of spring steel. The combination of **steel-zincite** is the only one that was found practical for the Crystodyne oscillating crystal. Note the micrometric adjustment that can be made by means of the large knob bearing against the steel spring. This raises and lowers the steel point to the finest possible degree. The base is of bakelite, all parts nickel plated and polished.

J6900—Crystodyne Zincite Detector with Crystal $1.75

J6900—Natural Zincite Mounted Crystal especially tested for Crystodyne work, fits any crystal cup..... .60



SCRAP *that Unsightly Horn!*

LET a Dulce-Tone link all the fine reproducing qualities of your talking machine to your radio. Dulce-Tone is NOT an attachment. Simply—

place the needle on the Dulce-Tone reed

No part of the talking machine is removed or tampered with!

Never before has the true volume of the incoming signal been combined with the supreme tonal qualities of the talking machine. Leading talking machine engineers agree that Dulce-Tone sets a new standard of radio reception.

If your nearest music store or radio dealer has not the Dulce-Tone, *do not accept a substitute.* Order direct from us. Price $10, complete with six feet of phone cord.

THE TEAGLE COMPANY
1125 Oregon Ave. Cleveland, Ohio

Dulce-Tone

Amplifying CUSHIONS

Pat. Pending

The Tone Chamber Does It

Catches every sound wave from the receiver diaphram and megaphones it to the sensitive part of the ear.

The soft rubber cushions exclude room noises yet comfort and ventilate the ears.

Easily installed in two minutes by anyone.

Sent prepaid in pairs upon receipt of

ONE DOLLAR

Mention make of your phones

Special Terms to Dealers

RADIO RUBBER SPECIALTY CO.

Dept. 4
5351 Lexington Avenue Los Angeles, Calif.

SOLDER WITH INSULATION

At Least 1,000 Miles More Distance

is the usual reward if you can solder without impairing the insulation of your set.

If you are building a radio-frequency amplifier you should read our free booklet:

"HOW TO SOLDER RADIO SETS"

Write for it

THE VALLEY FORGE CHEMICAL CO.,
Valley Forge, Pa.

Now Ready!
The DICTOGRAPH
Radio Loud Speaker
For the Home

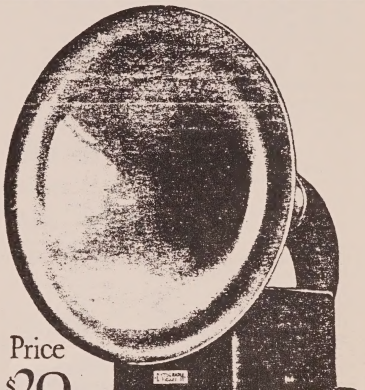
SINCE the first announcement of the development of a Dictograph Radio Loud Speaker, interest on the part of the radio public has run high.

The great Dictograph organization, famous the world over for its marvelously sensitive "Acousticon" for the Deaf and loud-speaking telephones, has concentrated on the perfection of this new Radio Loud Speaker. It is worthy of the Dictograph name—and that means *Standard of the World!*

Here at last is the Loud Speaker you have been waiting for—a Loud Speaker that reproduces every sound—singing, instrumental music and voice—in full volume and with absolutely clear, natural tones, free from distortion or mechanical sounds. It is used with any vacuum tube radio set. No alterations are needed; no extra batteries—you simply plug in and listen.

Assured demand, volume production, and Dictograph resources have made possible a reduction from the price originally announced. Instead of $25, **the price is only $20—complete with 5 ft. cord.**

Ask your dealer to show you the **Dictograph Radio Loud Speaker.** Place your order now to assure early delivery. Dealers can be supplied by their jobbers or our authorized distributors.



Price
$20
Complete with 5 ft. flexible cord.

The handsome appearance of the Dictograph Radio Loud Speaker harmonizes with any home. It has a highly burnished spun copper bell horn attached to die cast black enamel tone arm, finished with nickel trimmings. The cabinet is of solid ebony-finished hardwood and mounted upon rubber knobs to avoid marring highly polished tables. It is furnished complete with 5 ft. flexible cord. No extra batteries required.

DICTOGRAPH *Radio* HEAD SET

The Dictograph Radio Head Set has established a standard of quality impossible to secure in any other product—its use on an ordinary receiving set, whether crystal set or vacuum tube receiving unit, improves reception immeasurably. Insist on the Dictograph—Price $12.00—3000 ohms resistance.

The Best Head Set in the World at any Price!

DICTOGRAPH PRODUCTS CORPORATION

Branches in all principal cities

220 WEST 42d STREET **NEW YORK CITY**

By RAY FROST

October, 1922

Radio News

THE tremendous, world-wide interest in radio has brought to at least one man the realization of the dreams of a lifetime.

Nathaniel Baldwin, a devout Mormon, was the inventor, ten or a dozen years ago, of a highly sensitive telephone receiver, but until the advent of radio broadcasting, never experienced the least difficulty in meeting the demand for his instrument at his little hillside factory on the outskirts of Salt Lake City—that is, when he was able to raise the money for material. Now he is swamped, buried, overwhelmed with orders.

From every state in the union, every civilized country, the farthest islands of the sea, orders for Baldwin's radio headsets have poured in until there are now on file in his shanty office unfilled demands for more than 200,000 pairs.

Baldwin's modest plant lies against the base of the Wasatch Mountains, 23 oversize Salt Lake blocks to the east of the Mormon temple, and 35 to the south.

A lane, jammed with the motor cars of his employees, runs above his plant, which has been added to from time to time, until it now extends down the lot in a long row of narrow wooden buildings. A roaring mountain stream runs past the workroom windows at one side, and at the opposite windows the fragrance of peach and apple trees drifts in. One is struck with the thought that here in this clean and airy sunlight would be a good place to work.

Baldwin, the man, is a product peculiar to the region in which he has been born and reared, modest to the point of diffidence. In his office is a drafting table in lieu of desk, and two or three plain chairs. On the table are the Book of Mormon, Doctrine and Covenants and Pearl of Great Price, standard works of the Mormon faith. The covers of these volumes harbor no dust.

Baldwin leans against the drafting table and smiles in a guarded, friendly fashion as he talks. He was born at Fillmore, Utah, in 1878, and as a boy set out on foot for Provo, 120 miles away, on the chance of finding an opportunity to work his way through Brigham Young University. He had no money for fare nor tuition, and was none too well clad, but the boy whose name was destined to become so well known in the future world of radio, worried about those things not at all. He knew nothing of luxurious travel or life without hard work, and all he asked was a chance to earn his way.

To some, Provo might have seemed a small and uninteresting town, even though it lay between the dimpling fresh waters of Lake Utah and the base of lofty Timpanogos, with the giant Indian figure lying flat on its back along the crest, but to young Nathaniel it was a golden city of Baghdad. Among its enchanted streets he wandered in the heat of midday, and before the sun had set had found a place to live in exchange for a few hours of work morning and evening.

In due time he graduated from the school, and having earned and saved sufficient money to take him to Palo Alto, in California, repeated the process at Leland Stanford, Jr.

The world looked bright when, at the age of twenty-six, he returned to B. Y. as Professor of Physics, but the end of his second year in that capacity saw him dismissed and discredited in the eyes of his fellows.

Brigham Young University is a church-controlled institution, and after several warnings, the authorities had seen fit to discipline Baldwin for a lack of discretion in his discussions of a certain ancient principle which it had seemed best to abandon. The leaders of the church had declared against the continuation of plural marriages, and the instructor had failed to temper his remarks in accordance with their directions.

A period of bitter struggle followed for young Professor Baldwin, who had a wife to support now, and he was reduced to the necessity of gaining a livelihood as best he might in a community where few dared befriend him. His credit at the grocery store had mysteriously been cancelled, and he was compelled to accept whatever employment he could find that he might earn money to live. He dug post holes and he cleaned flues—but he did not change his mind about what he regarded as his right to freedom of speech.

A position as operator of a hydro-electric plant, for which he was well qualified, was offered him at Mountain Lake, 20 miles in the mountains. He took the job, but his tenure was short.

Continued on P. 15

A similar place was open with the Progress Co., a small concern with a powerhouse in Mill Creek canyon, 50 miles away, in the mountains adjacent to Salt Lake City. Into this secluded canyon Baldwin took his family, and there he perfected and patented his receiver.

With money he saved from his salary he purchased the lot where his rambling plant stands, and put up the first diminutive unit of his factory.

From that time onward his progress was marked by the experiences usual to the making and marketing of patented devices in competition with long-established articles. His receiver was a practical one, and certainly was more sensitive than those in general use by telephone companies. It may have been too sensitive for the average ear, or it may have been that its greater cost kept down the volume of its sales.

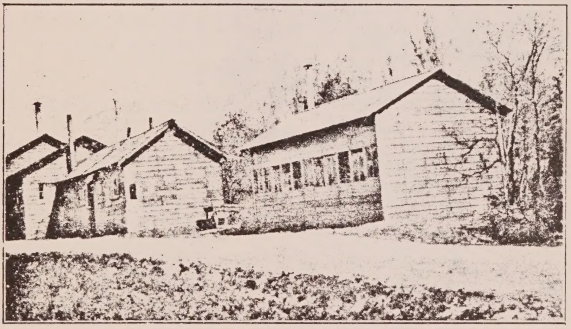
At any rate, until the advent of radio telephony, Baldwin's factory, with the addition of another small building from time to time, was adequate for the manufacture of all the receivers he could sell.

Then came the tremendous interest in radio, and with it came the avalanche of orders that since November has exceeded the capacity of his plant by the enormous total of 200,000 sets.

An idea of what it may mean when an inventor's dream comes true may be had when it is stated that the filling of these surplus orders has been contracted on the basis of a royalty, said to be two dollars on each set.

Meanwhile Baldwin will go on supervising his little factory, helping to get out its normal production of 150 sets each day.

Nathaniel Baldwin is a modest and unassuming man. With flannel shirt open at the neck he stands with his elbow on the drafting table in his little office, smiling in a dazed sort of way as he talks. One could wish he were not quite so modest; then he might have been persuaded to pose for an unconventional picture.



The Home of the Baldwin Phone. View of the Hillside Factory Near Salt Lake City, Where Nathaniel C. Baldwin Supervises the Manufacture of His Phones.

MPM
MILLION POINT MINERAL
THE WORLD'S GREATEST RADIO CRYSTAL

THIS REMARKABLE CRYSTAL

is revolutionizing the possibilities of Crystal Sets. Unsolicited testimonials from all parts of the country report records of from 600 to 1200 miles with ordinary sets equipped with

M.P.M. (Million Point Mineral) CRYSTALS

Don't discard your Crystal Set until you have given M. P. M. a trial. Send 25c. and name of your Radio Dealer for sample unmounted crystal—35c. for mounted. Beware of Imitations.

M. P. M. SALES CO., Dept. N. 247 S. Central Ave., Los. Angeles

MUTT AND JEFF— *From the N. Y. World* . . **By BUD FISHER**

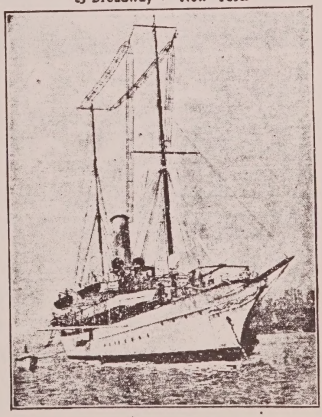
(Copyright, 1928, by H. C. Fisher, Trade Mark Reg. U. S. Pat. Off.)

YOU'RE A PUNK RADIO SALESMAN. YOU WALK UP TO A GUY AND ASK HIM IF HE WANTS TO BUY A RADIO AND IF HE SAYS NO! YOU WALK OFF.
?
MOST PEOPLE KNOW NOTHING ABOUT THE RADIO! - TALK FAST! TELL THEM OF THE GREAT MYSTERY OF THE AIR, OF THE GREAT POSSIBILITIES OF THE FUTURE, OF THE SECRET OF THE AIR WAVE.
HUM!
BUT LISTEN STRANGER! YOU DON'T KNOW THE WONDERFUL WORKINGS OF THIS GREAT INVENTION OF MERE MAN. OF THIS CONQUERING OF THE AIR, OF THE UNTOLD POSSIBILITIES OF SUBDUER OF NATURE! WHY, MAN! —
IN A FEW MONTHS, WE MAY BE SHAKING HANDS, VERBALLY SPEAKING, WITH THE PLANET MARS. AND LOOK —
HEY! COME HERE!
SAP! OUT OF ALL THE PEOPLE IN THIS WORLD YOU HAD TO PICK OUT MARCONI.

Perhaps Mutt managed to put a Mars radio aboard the Elettra after all. ed.D.S.

COPPER FOR BEST RESULTS

25 Broadway ✓ New York



Signor Marconi's Yacht "Elettra"

THE world was set agape not long ago by a report that mysterious radio signals had been received from the planet Mars by Signor Marconi. The delicate sensibilities of the Copper wires with which the *Elettra* is equipped apparently had detected and defined sound waves that had received their initial impulse millions of miles away.

Whether or not in this instance Mars was no further than Schenectady, the fact remains that Copper does its job so well that those who want the best radio results are taking no chances with substitutes.

Be sure it's Copper, pure Copper, if you want good service.

COPPER & BRASS RESEARCH ASSOCIATION

For Sale or Trade & Want Ads

ADS MUST BE SUBMITTED EACH TIME FOR EACH PUBLICATION. ADS ARE SUBJECT TO EDITING AND SPACE LIMITATIONS. ADS ARE FOR MEMBERS ONLY.

WANTED — Anything old in radios and equipment. Don't throw it out, bring it of John A. Helfrich. 115 N. Pleasant Ave. P.O. Box 66. Dallastown, PA 17313.

FOR SALE — Huge collection of antique radio equipment, 1920 to 1940. Early battery sets, AC sets, TV's, phonos and much more. All must go. Reasonable prices. F. Long. 8874 S. Broadway. Los Angeles, CA 90003. 10 AM to 6 PM Mon-Fri; 10 AM to 3 PM Sat & Sun.

RE-NU Radio "B" Batteries

Re-fill-a-ble

Use Standard Flashlight Cells. More Economical. No Soldering—No Springs. Made for 22.5 and 45 volts
Send for free descriptive literature.
STEINER BATTERY CO., Lancaster, Ohio

BACK ISSUES

The following SCARS *Gazettes* are available at $2.00 each. Make out your check and mail to: SCARS Secretary. 656 Gravilla Place. La Jolla, CA 92037. Issues prior to 1982 are limited so please specify alternates.

Volume 3, No. 4	.1978
Volume 4, Nos. 1, 2, 3 & 4	.1979
Volume 5, Nos. 1 & 2	.1980
Volume 6, Nos. 2 & 4	.1981
Volume 7, No. 1	.1982
Newsletter, October	.1982
Volume 8, Nos. 1 & 2	.1983

FOR SALE — *Golden Moments of Radio*, (1929-1955). $5.00 ppd. SASE. Also SW-3 with 2 sets of coils and PS (homebrew), $110.00 Bill Alverez. 19867 E. Vista Hermosa Drive. Walnut, CA 91789. (714) 595-5556.

SALE — Radiola Loop Antenna wire. Looks just like the brown wire used on RCA and other 1920's loop antennas. 500' spool for $35. Shorter lengths, 13¢ per foot. Add $2 per order for shipping and handling. SASE for free wire samples. R. A. Goodman. 7943 Ponce. Canoga Park, CA 91304.

FOR SALE or TRADE — A-K Breadboard (never used) in an A-K wood shipping case. Also have UX200's, new, in RCA cartons, $7.00 each. Some literature. All American cone speaker. Send SASE. F. A. Paul. 1545 Raymond. Glendale, CA 91201.

WANTED — Amplion AR19 driver Music Master neck and flair. Have some DeForest Audions for trade. E. Clement. 6585 Viau. Montreal, Que. H1T 2Y8, Canada. (514) 255-9141.

WANTED — Copies or originals of Gilfillan product information, sales brochures, etc. Does anyone have documentation of the 1939 Gilfillan mirror-lid television receiver? Ed Reitan. 208-7363 (home) or 988-2600, Ext. 7170 (work).

WANTED — Receivers made by The Radio Shop. Have lots of rare early receivers to trade or will buy. Stew Oliver. 688 Mildred Ave. Venice, CA 90291. (213) 823-1194.

WANTED — Radio Retailing magazines, 1925-1929. F. A. Paul. 1545 Raymond. Glendale, CA 91201.

WANTED — Wireless and early '20's sets. Also all Scott. Recent collection purchases have resulted in lots of duplicates. I will sell or trade. Send SASE for list. Ed Sharpe. 2224 W. Desert Cove. No. 205. Phoenix, AZ 85029. (602) 861-1388.

WANTED — Early Emerson table radios and wooden case 10" TV. Also seeking Emerson Radio-Phono. Ray Miller. Box 1711. Oceanside, CA 92054.

American Marconi Cover Photo, continued. The 5/8 inch diameter steel tube located on the magnetic axis of the transformer must have consumed most of the received signal energy before it ever reached the detector. This tuner was photographed while it belonged to Glenn Streeter. It is now in the Ralph Muchow collection.

Instructions on the use of the

DICTOGRAPH RADIO LOUD SPEAKER

The Dictograph Radio Loud Speaker is designed for use in all types of radio receiving sets in which a detector unit and two stages of amplification are employed. It is not recommended for use with crystal receiving sets.

In using the Dictograph Radio Loud Speaker, all that is necessary is to tune the receiving set so that the maximum volume it is capable of receiving is had in the headset and then plug in or connect the Loud Speaker Cord to the binding-posts.

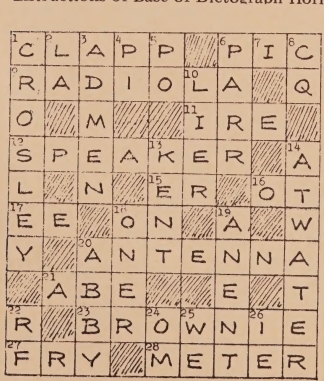
Battery: Best results will be secured by using 100 volts on the B Battery for the amplifying unit.

Do not attempt to take the Loud Speaker apart in the event results do not come up to your expectations. All Dictograph Radio material is guaranteed against defective workmanship and material. In the event any part of this Loud Speaker proves defective, return it prepaid to our Executive Offices and it will be repaired or replaced without charge.

This Loud Speaker was tested before leaving the Factory. Do not attempt to make any adjustments on the Loud Speaker Unit.

DICTOGRAPH PRODUCTS CORPORATION
220 WEST 42nd STREET
NEW YORK, N. Y.

Instructions of Base of Dictograph Horn



NEW MEMBERS

Ayre, J. . . . . Orange, CA
Baker, Gilford . . . . . Emden, IL
Ballew, Duane . . . . . Gig Harbor, WA
Billig, James . . . . . Bellflower, CA
Burnett, Lorne . . Edmonton, Alta., Canada
Clark, Edward A. . . . . Palm Desert, CA
Clement, Eddy . . . Montreal, Que. Canada
Clements, John . . . . . Sun Valley, CA
Densel, Thomas . . . . . Tulsa, OK
Doty, Mark A. . . . . Canoga Park, CA
Eilers, Irv A. . . . . Los Angeles, CA
Hadsell, Glen . . . . . Omaha, NE
Hartfield, Henry . . . . . Colton, CA
Helfrich, John . . . . . Dallastown, PA
Hopkins, Robert . . . . . Oxnard, CA
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Lover, Fred . . . . . Garden Grove, CA
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Rice, Tim . . . . . Santa Monica, CA
Ross, Chuck . . . . . Corona, CA
Smolski, Joe . . . . . Phoenix, AZ
Solow, Lawrence . . . . Saddle River, NJ
Spaulding, Harold . . . . . Upland, CA
Troe, James . . . . . Morristown, NJ
Watkins, Barbara . . . . . S. Pasadena, CA
Wiemers, Charles . . . . . Escondido, CA